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HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, CO 80527-2400			YE, LIN	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/078,742

Filing Date: February 19, 2002

Appellant(s): SLATTER ET AL.

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Charles W. Griggers  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 01/15/2007 appealing from the Office action mailed 07/11/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

U.S. Patent 5,912,653	Fitch	6-1999
U.S. Patent 4,965,705	Lin	10-1990
U.S. Patent 3,141,216	Brett	11-1962
U.S. Patent 6,667,771	Kweon	12-2003
U.S. Patent 5,014,079	Kakita	5-1991

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-7, 21, 8, 13-14, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705.

Referring to claim 1, the Fitch reference discloses in Figures 2A-B and 6, a wearable electromagnetic (EM) radiation transmitter/receiver (e.g., a garment with any type of electronic devices as LCD, **miniature cameras**, computers, etc... all signals can be set to a **broadcast frequency** allowing other receiving jackets operation on the same frequency to access by

transmitter 72, antenna 70, see Col. 4, lines 35-40) comprises a front portion and a rear portion, wherein the front portion includes transmission and reception section and is adapted to be worn outside a wearer's clothing (e.g., video tuner 36, video camera 40, audio output devices, input devices, etc... are external to the jacket, see Col. 3, lines 40-50), and wherein the rear portion includes a control section and is worn inside at least part of the wearer's clothing (e.g., microcontroller 22 is in the jacket as shown in 2A-2B, see Col. 5, lines 9-18), the front and rear portions being operable to communicate electrically with one another, and are physically connected to one another (by a fastener lock configuration 16 or any other convenient or conventional attachment , see Col. 3, lines 5-10 and Col. 5, lines 50-54), and to secure the front (electronic devices as LCD, miniature cameras, etc...) and the rear portion (microcontroller 22) in position on a wearer's clothing (one aperture 14 in the jacket). However, the Fitch reference does not explicitly show " a means to secure" as using an electrically conducting connection pin configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion instead of fastener lock.

The Lin reference teaches in Figure 3, an electronic jewelry (has a heart shape) including an electrically conducting connection pin (33) to secure the front and the rear portion in position on a wearer's clothing, the securing means being configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion (e.g., the pin 33 is in use to be operable for supplying electric power from the rear portion to the front portion. See Col. 2, lines 50-64, Figures 3 and 7). The Lin reference is evidence that one of ordinary skill in the art at the time to see more advantages the wearable electronic device using an electrically conducting connection pin to secure the front and the rear portions so that wearer can easily

attach or detach both front and rear portions of device from cloth. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing an electrically conducting connection pin to secure the front and the rear portions as taught by Lin ('705).

Referring to claim 4, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Fitch reference discloses the control section (microcontrollers 22) of the rear portion controls the transmission and reception sections (See Col. 5, lines 9-54).

Referring to claim 5, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Fitch reference discloses in which the front portion comprises an image capture means (miniature video camera, See Col. 3, lines 40-42 and Col. 5, lines 35-46).

Referring to claim 6, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 6, and the Fitch reference discloses in which the rear portion includes control means (microcontrollers 22) for the image capture means (by video switch 30, see Col. 3, lines 34-44).

Referring to claim 7, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Fitch reference discloses in which the rear portion also includes storage means (image memory 26, see Col. 3, lines 30-31) for storage of captured images as shown in Figures 2A-B.

Referring to claim 21, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Lin reference discloses wherein the securing means comprises a pin (see Col. 2, lines 49-55).

Referring to claim 8, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 21, and the Lin reference discloses in which the pin (33) is electrically conducting (pin 33 connecting power source 4, see Col. 2, lines 54-56).

Referring to claim 13, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Lin reference discloses in which the front portion (1) is incorporated into a piece of jewelry (e.g., having a heart shape).

Referring to claim 14, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Fitch discloses in which the transmitter/receiver has a plurality of different front portions all being differently shaped to blend with, or be suitable with, a wearer's clothing all being operable to be used with the same rear portion (e.g., the microcontroller 22 in the rear portion can be used to control any type of electronically device such as LCD, camera, video tuner, transmitter, computer, etc...suitable with a wearer's clothing, see Col. 5, lines 20-40).

Referring to claim 18, the Fitch and Lin references disclose all subject matter as discussed with respect to same comments to claim 1.

Referring to claim 19, the Fitch and Lin references disclose all subject matter as discussed with respect to same comments to claim 1.

Referring to claim 20, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Fitch reference discloses wherein the securing means extends through the wearer's clothing between the front and rear portions as shown in Figures 2A-B.

Referring to claim 22, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Fitch reference discloses the front and the rear portions are operable to communicate through inductive coupling as shown in Figures 2A-B and 6.

Claims 2 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705 and Brett U.S. Patent 3,141,216.

Referring to claim 2, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, except the references do not explicitly state wherein the securing means utilizes a magnet.

The Brett reference teaches in Figure 6, providing improved magnetic fastening means for garments and the like (See Col. 1, lines 13-22). The Brett reference is evidence that one of ordinary skill in the art at the time to see more advantages utilizing a magnet for securing a device on the garments so that it can fasten the members securely and with can be easily manipulated into an out of fastening position. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing the securing means utilizes a magnet as taught by Brett ('216).

Referring to claim 10, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 8, and the Lin reference discloses in which the pin (33) projects from the front portion to be received in a corresponding opening in the back portion. The Brett reference shows the pin projects from the rear portion to be received in a corresponding opening in the front portion. This is evidence that one of ordinary skill in the art at the time to see more

advantages for having more flexible options to design a pin projects either from the rear portion or front portion to be received in a corresponding in the front portion or rear portion. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing a pin projects either from the rear portion or front portion to be received in a corresponding in the front portion or rear portion as taught by Lin ('705) and Brett ('216).

Referring to claim 11, the Fitch, Lin and Brett references disclose all subject matter as discussed with respect to claim 21, and the Lin reference discloses in which the electrically conducting connection pin has multiple conduction paths (e.g., two pins 33 and 34 connecting with power source 4, See Col. 2, lines 47-56)

Referring to claim 12, the Fitch, Lin and Brett references disclose all subject matter as discussed with respect to claim 21, and the Lin reference discloses in which includes a plurality of electrically conducting connection pins arranged to connect the front and rear portions as shown in Figure 7.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705 and Kweon U.S. Patent 6,667,771.

Referring to claim 3, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 1, and the Fitch reference discloses includes a transmitter (72) for sending on broadcast frequency (radio frequency) to other receiving jackets (see Col. 4, lines 35-40). However, the Fitch reference does not explicitly states the transmitter is external to the jacket as in the front portion.

The Kweon reference teaches in Figures 1-5, a wearable electromagnetic (EM) radiation (e.g., a wearable wireless image transmission system having a small-sized camera 4 and radio frequency transmission device 14, see Col. 3, lines 30-37) transmitter/receiver (“transmitter/receiver” is considered as transmitter **or** receiver) comprises a front portion and a rear portion, wherein the front portion includes transmission/reception section and is adapted to be worn outside a wearer's clothing (e.g., the RF transmission device 14, a clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 are considered as the front portion, see Col.3, lines 45-50; those elements are worn outside a wearer's clothing as shown in Figure 5. It should be noted the reference number of “114” in Figure 5 actually means the RF transmission device 14, see Col. 4, lines 6-12). The Kweon reference is evidence that one of ordinary skill in the art at the time to see more advantages the transmitter and antenna adapted to be worn outside the wearer's clothing so that the strong and clear signals can be transmitted directly to the remote without obstructed by the wearer's clothing. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing the transmitter is external to the jacket as in the front portion as taught by Kweon ('771).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705 and Kakita U.S. Patent 5,014,079.

Referring to claim 23, the Fitch and Lin references disclose all subject matter as discussed with respect to claim 5. However, the Fitch reference does not explicitly states the image

capture means (miniature video camera) is triggered to capture an image in response to detecting laughter.

The Kakita reference teaching a camera is triggered to capture (release operation) an image in response to detecting laughter (See Col. 1, lines 5-18). The Kakita reference is evidence that one of ordinary skill in the art at the time to see more advantages the camera system can be triggered to capture an image in response to detecting laughter so that all the participants including a person serving as a photographer can enjoy a banquet or a party. For that reason, it would have been obvious to one of ordinary skill in the art to modify the camera device of Fitch ('653) by providing an automatically image capturing function for capturing image in response to detecting laughter as taught by Kakita ('079).

#### **(10) Response to Argument**

For claim 1, the appellant argues the Fitch and Lin references individually, and appellant states Fitch fails to teach or suggest, "the securing means being configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion" recited in the claim 1 (See appellant's Argument section, page7, lines 15-25).

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Fitch clearly discloses by using a slide fastener lock configuration 16 18, **or by any other conventional attachment** to secure the front (electronic devices as LCD, miniature

cameras, etc...) and the rear portion (microcontroller 22) in position on a wearer's clothing (See Fitch's Col. 3, lines 7-9 and Col. 5, lines 50-54). By using an electrically conducting connection pin to secure the front and the rear portion in position on a wearer's clothing is considered a conventional attachment.

The Lin reference teaches in Figure 3, an electronic jewelry (has a heart shape) including an electrically conducting connection pin (33) to secure the front and the rear portion in position on a wearer's clothing, the securing means being configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion (e.g., the pin 33 is in use to be operable for supplying electric power from the rear portion to the front portion. See Col. 2, lines 50-64, Figures 3 and 7). The Lin reference is evidence that one of ordinary skill in the art at the time to see more advantages the wearable electronic device using an electrically conducting connection pin to secure the front and the rear portions so that wearer can easily attach or detach both front and rear portions of device from cloth. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing an electrically conducting connection pin to secure the front and the rear portions as taught by Lin ('705).

The appellant argues that Fitch is so obviously concerned with securing the liquid crystal displaying to a garment to protect the device and to prevent theft (e.g., sewing and bonding a lock fastener to the garment), it is not understood how a fastening mechanism taught by Lin is consistent with those objectives (See appellant's Argument section, page8, lines 5-9).

The examiner disagrees. The Fitch reference discloses in Figure 3 and Col. 4, lines 41-47, the jacket (garment) comes with a built-in global positioning system GPS "for security

against theft. Information of the location of the jacket can be used and broadcast to inform law enforcement as well as friends to give information of the position of the location of the wearer of the jacket". It should be noted that this is different than the applicants argument "Fitch is so obviously concerned with securing the liquid crystal display to a garment to protect the device and to prevent theft", because Fitch uses the GPS system for determining the location of the jacket and does not state the LCD display can not be separated from the jacket (e.g., the prevention of theft has nothing to do with choosing what type of fastening mechanism for attaching the electronic device on the garment such as LCD ). Similarly, the Fitch reference discloses a plurality type electrical devices, LCD, input devices (e.g., video camera 40, video recorder 38, video tuner 36, see Col. 3, lines 40-44 and Col. 4, lines 31-33) can be attached on the garment.

The Appellant argues that Fitch appears to provide no suggestion of motivation for modifying its teachings to include the suggested fastening mechanisms since they do not appear to be consistent with the teachings of Fitch (See appellant's Argument section, page 9, lines 13-16).

The examiner disagrees. Fitch clearly discloses by using a slide fastener lock configuration 16 18, **or by any other conventional attachment** to secure the front (electronic devices as LCD, miniature cameras, etc...) and the rear portion (microcontroller 22) in position on a wearer's clothing (See Fitch's Col. 3, lines 7-9 and Col. 5, lines 50-54). By using Lin's electrically conducting connection pin to secure the front and the rear portion in position on a wear's clothing is considered as one of the conventional attachment methods.

For claim 5, the appellant argues Fitch's liquid crystal display is not disclosed to be an image capture means (See appellant's Argument section, page 11, lines 12-13).

The examiner disagrees. The claim 5 is only required the front portion comprises an image capture means, and the front portion is external to the jacket ("worn outside a wearer's clothing" as recited in claim 1). For this reason, the Fitch reference clearly discloses in which the front portion comprises an image capture means (e.g., miniature video camera considered as the front portion is external to the jacket and electronically **connected** to the control section as microcontroller 22 which included in the rear portion as shown in Figure 6, See Col. 3, lines 40-42 and Col. 5, lines 35-46).

For claim 18, please see above the examiner's comments on claim 1 in response to appellant's arguments.

For claim 19, please see above the examiner's comments on claim 1 in response to appellant's arguments.

For claim 3, the appellant argues that Kweon fails to teach or suggest, "in which the front portion includes a radio transmitter" as recited in the claim 3 (See appellant's Argument section, page 20, lines 11-12).

The examiner disagrees. The Kweon reference teaches in Figures 1-5, a wearable electromagnetic (EM) radiation (e.g., a wearable wireless image transmission system having a small-sized camera 4 and radio frequency transmission device 14, see Col. 3, lines 30-37) transmitter/receiver ("transmitter/receiver" is considered as transmitter **or** receiver) comprises a front portion and a rear portion, wherein the front portion includes transmission/reception section and is adapted to be worn outside a wearer's clothing (e.g., **the RF transmission device 14**, a

clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 **are considered as the front portion**, see Col.3, lines 45-50; **those elements are worn outside a wearer's clothing** as shown in Figure 5. It should be noted the reference number of "114" in Figure 5 actually means the RF transmission device 14, see Col. 4, lines 6-12). The Kweon reference is evidence that one of ordinary skill in the art at the time to see more advantages the transmitter and antenna adapted to be worn outside the wearer's clothing so that the strong and clear signals can be transmitted directly to the remote without obstructed by the wearer's clothing. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing the transmitter is external to the jacket as in the front portion as taught by Kweon ('771).

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained. Respectfully submitted,

  
LY  
LIN YE  
PRIMARY PATENT EXAMINER

April 25, 2007

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